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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,451	06/25/2003	Chang Heui Hong	2060-3-51	4369

35884 7590 07/26/2006

LEE, HONG, DEGERMAN, KANG & SCHMADEKA  
801 S. FIGUEROA STREET  
12TH FLOOR  
LOS ANGELES, CA 90017

EXAMINER

WANG, JIN CHENG

ART UNIT	PAPER NUMBER
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2628

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/603,451	<b>Applicant(s)</b> HONG, CHANG HEUI	
	<b>Examiner</b> Jin-Cheng Wang	<b>Art Unit</b> 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1, 7-20, 25-36 and 38-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 7-20, 25-36, and 38-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

Applicant's submission filed on 5/30/2006 has been entered. Claims 1, 7-8, 20, and 25 have been amended. Claims 2-6, 21-24 and 37 have been canceled. Claims 38-50 have been newly added. Claims 1, 7-20, 25-36, and 38-50 are pending in the application.

### *Response to Arguments*

Applicant's arguments filed May 30, 2006 have been fully considered but are moot in view of the new ground(s) of rejection.

As address below, the Claim 1 is unpatentable over Uyehara et al. U.S. Patent No. 6,154,214 (hereinafter Uyehara) in view of Kfoury et al. US 2003/0044000 A1 (hereinafter Kfoury).

Uyehara discloses a method of configuring an image displayed on a display unit of a mobile terminal, the method comprising:

Rotating a first image displayed on the display unit (*e.g., rotating the first image displayed on the Fig. 17*), in a first direction (*e.g., in a portrait mode*) relative to the display unit, to display a second image (*in response to the user's pressing of the orientation key 80 to display a second image in landscape mode*);

Adjusting dimension and orientation of the second image relative to dimensions of the display unit (*the dimensional configuration of the image displayed in Fig. 18 are different from the dimensional configuration of the first image displayed in Fig. 17 in the portrait mode and the texts are redisplayed with the orientation shown in Fig. 18, see column 12. Adjusting the display*

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*orientation of the first image also adjusts the dimensional configuration of the second image in Fig. 18 in accordance with the width and height of the display unit).*

Uyehara discloses an orientation key 80 and a plurality of software controlled markers 240-246 in response to the pressing of the orientation key 80 to control the rotation orientation of the image. The plurality of markers are software control keys (soft keys) in which the user can tap or touch (e.g., column 12, lines 20-21 and column 12, lines 50-57). The plurality of markers include a first and second orientation markers performing the same function as the first and second direction keys of performing clockwise or counter-clockwise rotation of the image (See column 6, lines 10-36). The plurality of markers also include a third and fourth orientation markers performing the same function as the third and fourth direction keys of performing 180 degree rotation or 0 degree rotation to return to its original orientation (column 6, lines 21-36). These four markers are software controlled to indicate direction or orientation in which the first image in Fig. 17 is rotated.

Therefore, Uyehara at least discloses or suggests the claim limitation “wherein the user input is provided via a keypad of the mobile terminal, wherein the keypad comprises first and second direction keys, wherein the first direction key is associated with a clockwise direction of rotation and the second direction key is associated with a counter-clockwise direction of rotation, wherein pressing the first direction key causes the first image to be rotated clockwise by approximately 90 degrees, wherein pressing the second direction key causes the first image to be rotated counter-clockwise by approximately 90 degrees.”

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It would have been obvious to one of the ordinary skill in the art at the time the invention was made to have modified the software controlled markers of Uyehara with any forms of keys. Whatever arrangement/placement of the keys on the mobile device do not matter as long as they are used to perform the same functions, i.e., rotating the image in clockwise direction, counter-clockwise direction etc. One of the ordinary skill in art realizes that locations for placing the keys on the mobile device can be changed. As to the use of the keys instead of the orientation key in combination with the markers, one of the ordinary skill in the art realizes that markers are software controlled markers which can be tapped to issue commands to control the image orientation performing the same function of the keys. One of the ordinary skill in the art would have been motivated to do this to select a text orientation which corresponds to the user's preferred device orientation and gripping method (Uyehara column 6, lines 21-36).

Uyehara is silent to the claim limitation "wherein the second image has the same width-height aspect ratio as the first image."

However, Kfoury discloses the claim limitation "wherein the second image has the same width-height aspect ratio as the first image." Kfoury discloses in Figs. 1-4 that the second image has the same width-height aspect ratio as the first image, i.e., the second image in Fig. 2 having the text characters has the same width-height aspect ratio as the first image in Fig. 1 having the text characters and the second image in Fig. 4 having the text characters has the same width-height aspect ratio as the first image in Fig. 3 having the text characters.

Moreover, Kfoury discloses in Paragraph 0030 the claim limitation of "wherein the user input is provided via a keypad of the mobile terminal, wherein the keypad comprises first and second direction keys, wherein the first direction key is associated with a clockwise direction of

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rotation and the second direction key is associated with a counter-clockwise direction of rotation, wherein pressing the first direction key causes the first image to be rotated clockwise by approximately 90 degrees, wherein pressing the second direction key causes the first image to be rotated counter-clockwise by approximately 90 degrees.”

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to have incorporated Kfoury's teaching into Uyehara. Uyehara discloses the first image in Fig. 17 having a height C and a width D and the display unit of Fig. 18 has width A and a height B in which the height C of the image corresponds with the width A of the display and the width D of the image corresponds with the height B of the display. In view of the above teaching of Uyehara, **the second image in Fig. 18 has the same width-height aspect ratio as the first image in Fig. 17.** It would have been obvious to see from the image of Fig. 17 and the display unit of Fig. 18 to see  $C = A$  and  $B = D$ . Therefore, Uyehara at least suggests the claim limitation wherein the second image has the same width-height aspect ratio as the first image.

One of the ordinary skill in the art would have been motivated to maintain the same width-height aspect ratio for the rotated second image as the first image (See Kfoury Figs. 1-4 and Uyehara Figs. 17-18).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Claims 1, 7-20, 25-36 and 38-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

For example, the base claim 1 recites, “wherein the second image has the same width-height aspect ratio as the first image”. However, according to applicant’s specification, the aspect ratio of the second image is different from the aspect ratio of the first image (See for example Paragraph 0024-0027 of the applicant’s specification). The metes and bounds of the coverage of at least base claim 1 cannot be ascertained.

To comply with the “written description” requirement of 35 U.S.C. 112, first paragraph, an applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purposes of the “written description” inquiry, whatever is now claimed. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991). For purposes of written description, one shows “possession” by descriptive means such as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention. *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997). Such descriptive means cannot be found in the disclosure for the inventions of the claim 1.

The claims 7-19, 38-39 and 42 depend upon the claim 1 and are rejected due to their dependency on the claim 1.

The claim 20 is subject to the same rationale of rejection set forth in the claim 1.



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The claims 25-36, 40-41 and 43 depend upon the claim 20 and are rejected due to their dependency on the claim 20.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 7-19, 38-39 and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the user input" in line 7 of the claim. There is insufficient antecedent basis for this limitation in the claim.

The claims 7-19, 38-39 and 42 depend upon the claim 1 and are rejected due to their dependency on the claim 1.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



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Claims 1, 7-9, 14-16, 20, 25-27, 32-34 and 44-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uyehara et al. U.S. Patent No. 6,154,214 (hereinafter Uyehara) in view of Kfoury et al. US 2003/0044000 A1 (hereinafter Kfoury).

Re Claims 1, 7-9, 14-16, 20, 25-27 and 32-34:

Uyehara discloses a method of configuring an image displayed on a display unit of a mobile terminal, the method comprising:

Rotating a first image displayed on the display unit (*e.g., rotating the first image displayed on the Fig. 17*), in a first direction (*e.g., in a portrait mode*) relative to the display unit, to display a second image (*in response to the user's pressing of the orientation key 80 to display a second image in landscape mode*);

Adjusting dimension and orientation of the second image relative to dimensions of the display unit (*the dimensional configuration of the image displayed in Fig. 18 are different from the dimensional configuration of the first image displayed in Fig. 17 in the portrait mode and the texts are redisplayed with the orientation shown in Fig. 18, see column 12. Adjusting the display orientation of the first image also adjusts the dimensional configuration of the second image in Fig. 18 in accordance with the width and height of the display unit*).

Uyehara discloses an orientation key 80 and a plurality of software controlled markers 240-246 in response to the pressing of the orientation key 80 to control the rotation orientation of the image. The plurality of markers are software control keys (soft keys) in which the user can tap or touch (*e.g., column 12, lines 20-21 and column 12, lines 50-57*). The plurality of markers

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include a first and second orientation markers performing the same function as the first and second direction keys of performing clockwise or counter-clockwise rotation of the image (See column 6, lines 10-36). The plurality of markers also include a third and fourth orientation markers performing the same function as the third and fourth direction keys of performing 180 degree rotation or 0 degree rotation to return to its original orientation (column 6, lines 21-36). These four markers are software controlled to indicate direction or orientation in which the first image in Fig. 17 is rotated.

Therefore, Uyehara at least discloses or suggests the claim limitation “wherein the user input is provided via a keypad of the mobile terminal, wherein the keypad comprises first and second direction keys, wherein the first direction key is associated with a clockwise direction of rotation and the second direction key is associated with a counter-clockwise direction of rotation, wherein pressing the first direction key causes the first image to be rotated clockwise by approximately 90 degrees, wherein pressing the second direction key causes the first image to be rotated counter-clockwise by approximately 90 degrees.”

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to have modified the software controlled markers of Uyehara with any forms of keys. Whatever arrangement/placement of the keys on the mobile device do not matter as long as they are used to perform the same functions, i.e., rotating the image in clockwise direction, counter-clockwise direction etc. One of the ordinary skill in art realizes that locations for placing the keys on the mobile device can be changed. As to the use of the keys instead of the orientation key in combination with the markers, one of the ordinary skill in the art realizes that markers are software controlled markers which can be tapped to issue commands to control the image

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orientation performing the same function of the keys. One of the ordinary skill in the art would have been motivated to do this to select a text orientation which corresponds to the user's preferred device orientation and gripping method (Uyehara column 6, lines 21-36).

Uyehara is silent to the claim limitation "wherein the second image has the same width-height aspect ratio as the first image."

However, Kfoury discloses the claim limitation "wherein the second image has the same width-height aspect ratio as the first image." Kfoury discloses in Figs. 1-4 that the second image has the same width-height aspect ratio as the first image, i.e., the second image in Fig. 2 having the text characters has the same width-height aspect ratio as the first image in Fig. 1 having the text characters and the second image in Fig. 4 having the text characters has the same width-height aspect ratio as the first image in Fig. 3 having the text characters.

Moreover, Kfoury discloses in Paragraph 0030 the claim limitation of "wherein the user input is provided via a keypad of the mobile terminal, wherein the keypad comprises first and second direction keys, wherein the first direction key is associated with a clockwise direction of rotation and the second direction key is associated with a counter-clockwise direction of rotation, wherein pressing the first direction key causes the first image to be rotated clockwise by approximately 90 degrees, wherein pressing the second direction key causes the first image to be rotated counter-clockwise by approximately 90 degrees."

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to have incorporated Kfoury's teaching into Uyehara. Uyehara discloses the first image in Fig. 17 having a height C and a width D and the display unit of Fig. 18 has width A and

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a height B in which the height C of the image corresponds with the width A of the display and the width D of the image corresponds with the height B of the display. In view of the above teaching of Uyehara, **the second image in Fig. 18 has the same width-height aspect ratio as the first image in Fig. 17.** It would have been obvious to see from the image of Fig. 17 and the display unit of Fig. 18 to see  $C = A$  and  $B = D$ . Therefore, Uyehara at least suggests the claim limitation wherein the second image has the same width-height aspect ratio as the first image.

One of the ordinary skill in the art would have been motivated to maintain the same width-height aspect ratio for the rotated second image as the first image such that the original image remains un-scaled while being rotated (See Kfoury Figs. 1-4 and Uyehara Figs. 17-18).

Re Claims 38-39, 42, 40-41 and 43:

Kfoury further discloses in Paragraph 0030 the first direction key being the same as the second direction key such as the key 106 and further teaches the at least one numeric key on the keypad. Kfoury further discloses the keypad further comprises a third direction key such as the key 106 and pressing the third direction key causes the second image to be a mirror image of the first image by rotation 180 degrees (See Paragraph 0030).

Claim 44:

The claim 44 encompasses the same scope of invention as that of the claim 1 and is subject to the same rationale of rejection set forth in the claim 1.

Claims 45—50:

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The claims 45-50 encompass the same scope of invention as that of the claims 1, 7 and 42. The claims are subject to the same rationale of rejection set forth in the claims 1, 7 and 42.

Claims 10-13, 19, and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uyehara et al. U.S. Patent No. 6,154,214 (hereinafter Uyehara) in view of Kfoury et al. US 2003/0044000 A1 (hereinafter Kfoury) and Anderson et al. U.S. Patent No. 6,262,769 (hereinafter Anderson).

Re Claims 10-13, 19, 28-31:

Uyehara discloses the first image in Fig. 17 having a height C and a width D and the display unit of Fig. 18 has width A and a height B in which the height C of the image corresponds with the width A of the display and the width D of the image corresponds with the height B of the display. It would have been obvious to see from the image of Fig. 17 and the display unit of Fig. 18 to see  $C = A$  and  $B = D$ . As regards to the claim 12-13 and 30-31, Anderson discloses in column 8, lines 23-38 rotating a portrait image onto a landscape oriented display in which the portrait image can be reduced in size to display the entire image on the display. Anderson also discloses a landscape image being displayed on a portrait oriented display in which the landscape image can have portions of the image cut to fit onto the portrait oriented display and the landscape oriented image can be reduced in size to fit onto a portrait oriented display. Therefore, Anderson teaches the claim limitations set forth in the claims 12-13 and 30-31 in which  $C = A$  &  $B = D$  because the image of the size C & D are resized to fit onto the display of the size A & B. It would have been obvious to have incorporated Anderson into Uyehara and

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Kroufy because Anderson also teaches other claim limitations set forth in the independent claim 1 and 20 (See Anderson column 8). One of the ordinary skill in the art would have been motivated to resize or crop the image to fit the portrait image onto a landscape oriented display of a mobile device such as a digital camera (Anderson column 8).

Claims 17-18 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uyehara et al. U.S. Patent No. 6,154,214 (hereinafter Uyehara) in view of Kfoury et al. US 2003/0044000 A1 (hereinafter Kfoury) and Hull et al. US Patent No. 6,720,863 (hereinafter Hull).

Re Claims 17-18 and 35-36:

Uyehara discloses the four markers performing the function of the keys. However, Uyehara is silent to the claim limitation of “flickers”. Hull discloses in Fig. 8 that changing the color or shade of one or more virtual keys 855 of virtual keypad 853 being displayed by touch-screen LCD so that the light functions may animate a virtual key so that the virtual key flickers (Hull column 10-11). Therefore, having the combined teaching of Uyehara, Kroufy and Hull, it would have been obvious to have animated the markers of Uyehara so that the markers appear flickering to more prominently show the state of markers to indicate a state of conditions to the user. One of the ordinary skill in the art would have been motivated to animate the keys in a virtual keypad on a mobile electronic communication device to indicate the different messages received from multiple contacts (Hull column 10).

### ***Conclusion***

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jin-Cheng Wang whose telephone number is (571) 272-7665. The examiner can normally be reached on 8:00 - 6:30 (Mon-Thu).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jcw



KEE M. TUNG  
SUPERVISORY PATENT EXAMINER